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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,390	01/23/2002	Olukayode Anthony Ojo	NL010082	7680

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER

YENKE, BRIAN P

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

WAT

Office Action Summary	Application No. 10/055,390	Applicant(s) OJO ET AL.	
	Examiner BRIAN P. YENKE	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment (15 Nov 04).
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☒ Claim(s) 11 is/are allowed.
 6) ☒ Claim(s) 1 and 10 is/are rejected.
 7) ☒ Claim(s) 2-9 is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 15 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's arguments filed 15 Nov 05 with respect to claim 1 have been fully considered but they are not persuasive.

Applicant's arguments, filed 15 Nov 05, with respect to claims 2 and 11 has been fully considered and is persuasive. The rejection of claims 2-9 and 11 has been withdrawn.

Applicant's Arguments

a) *Regarding claim 1, applicant states that the filtered output of the spatial filter 18 is not an image signal with reduced noise but rather a motion value (M). Also, applicant states that there is no disclosure in Allred of a kernel of the sigma filter receiving and operating on pixels of both the current image and from the output of the spatio-temporal filter. Applicant states that neither of the filters operating on pixels of the current image or from the output of the filter.*

Examiner's Response

a) The examiner agrees that the output of the spatial filter is a motion value (M), which is derived by spatially filtering the difference values "D" between pixel input values $X_i(t)$ and the most recently stored pixel values $X_o(t-1)$. It should also be noted that Allred specifically discloses the step of averaging the difference values of the pixels in the matrix or kernel surrounding the pixel of interest (a spatial filter) to obtain a motion value with the noise filtered down. Thus given the broadest interpretation of the claimed invention Allred, does perform the limitation "for reducing noise", which is what the motion parameter is used for.

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Regarding the disclosure relating to a kernel of a sigma filter, the examiner directs the applicant's attention to filter function 26 which operates by filtering pixel values of the video image based on a first frame having currently stored (filtered) pixel values and a second frame having recently captured but not yet filtered pixel values (abstract), where filter functions 26 received the temporal filter output 38 and spatial filter output 18 via control 22 (Fig 2). Thus each filter works on a signals which is derived from the input $x_i(t)$ (current frame) and second frame (currently stored/filtered) $x_o(t-1)$ Fig 3.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Allred et al., US 6,310,982.

In considering claim 1,

Allred discloses a video image filter 10 (the claimed spatio-temporal filter unit), which includes a spatial filter 18 and a temporal filter 38 (Fig 2/3), which operates on a kernel of pixels (Fig 5a/b) in either a 5x5 or 3x3 pixel arrangement. The output of the spatially-temporally filtered image $x_o(t)$ is output and stored in memory 34 via filter

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functions 26 which operates one pixel kernel array, where it is recursively processed again (Fig 2).

In considering claim 10,

a) the claimed receiving means... is met by image filter 10 which receives an incoming image frame (col 4, line 25-33).

b) the claimed a display device... is met where the output of filter 10 can be displayed (col 4, line 53-54).

For limitation c, please refer to claim 1 above.

Allowable Subject Matter

3. Claim 11 is allowed.

Claims 2-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure—please see newly cited references on attached form PTO-892.

5. 4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Yenke whose telephone number is (571)272-7359. The examiner work schedule is Monday-Thursday, 0730-1830 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, John W. Miller, can be reached at (571)272-7352.

Any response to this action should be mailed to:
Commissioner of Patents and Trademarks

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Washington, D.C. 20231

or faxed to:

(703) 872-9314

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703)305-HELP.

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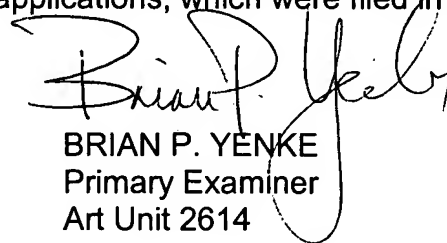
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BRIAN P. YENKE
Primary Examiner
Art Unit 2614



B.P.Y.
18 April 2005